

Dong Payton Pei

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SUMMARY

Bachelor of Computer Science from Carleton University with extensive co-op experience in software testing and development. Skilled in TypeScript, JavaScript, Python, and various other technologies. Seeking a Software Engineer position to leverage my skills in designing, developing, and testing software solutions.

EDUCATION

University of Ottawa Ottawa, ON
Master of Engineering System Science *Present*

Carleton University Ottawa, ON
Bachelor of Computer Science *2017 — 2023*

WORK EXPERIENCE

Software Developer Co-op Apr 2020 — Aug 2020
Ford Motor Canada *Ottawa, ON*

- Participated in Agile development, developed unit test scripts using C++11 Google Test Framework, and utilized Jenkins for CI/CD.

Software Tester Co-op Aug 2020 — Aug 2021
Nokia Canada *Ottawa, ON*

- Enhanced JavaScript/XML code for better code coverage and robustness.
- Produced design documents using Confluence Pages for system architecture and data flows.

PROJECTS

pipi-shrimp-agent github.com/mammut001/pipi-shrimp-agent

- A high-performance desktop AI agent built with Tauri v2.

Meet See U chatpart-website.vercel.app

- A full-stack AI social application featuring virtual companions with custom voice cloning, real-time AI video calling via WebRTC, and persistent vector memory.

Focus Mint apps.apple.com/us/app/focus-mint-focus-timer-study/id6759029810

- A premium utility app for iOS, watchOS, and macOS designed to enhance productivity through Pomodoro-style timers and session tracking.

System Optimization - Smart Path system-optimizaion.vercel.app

- A sophisticated algorithm visualization platform supporting graph theory (Dijkstra, A*, BFS/DFS), optimization (Simplex, Branch & Bound), and machine learning (Perceptrons).

RentWise github.com/random-char1198/Coin-Web-Crawler

- Implemented Google SignUp and SignIn for user authentication, securely storing user info in Firebase.

RESEARCH

Learning to See in the Dark 2018 Enhancement with DDBM 2024 — Present

- Research on enhancing low-light image processing using DDBM (Denoising Diffusion Probabilistic Models) based on the foundational 'Learning to See in the Dark' paper.

SKILLS

- **Languages:** TypeScript, JavaScript, Python, Java, C++, Swift, Rust, HTML, CSS, Bash
- **Frameworks & Data:** NextJS, TailwindCSS, Flask, Tauri v2, SQLite, MongoDB, JQuery
- **Testing & Delivery:** PyTest, GTest, SeleniumGrid, Jenkins, Docker, Vagrant
- **Tools & Platforms:** GitHub, Jira, Confluence, Linux, AWS, OpenStack, IntelliJ, PostMan, Windows10, Visual Studio, Typst, Mermaid, Object-Oriented Programming